APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,477	10/23/2001	Antti O. Kangas	872.0035.U1(US)	7456

			EXAMINER
29683	7590	06/30/2005	MERED, HABTE

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ART UNIT	PAPER NUMBER
2662	

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle,* 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>05 April 2002</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date *11/12/02*.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____ .

DETAILED ACTION

Specification

1.   The abstract of the disclosure is objected to because it contains more than 150

words. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   **Claims 1-26** are rejected under 35 U.S.C. 103(a) as being unpatentable over

3GPP TS 04.60 (ETSI, "Digital Cellular Telecommunications System (Phase2+);

General Packet Radio Service (GPRS); Mobile Station (MS) – Base Station System

(BSS) interface; Radio Link Control/Medium Access Control (RLC/MAC) Protocol)",

October 2000, pp 1-221) in view of Mohindra et al (US 6, 816, 881), hereinafter referred

to as Mohindra.

3GPP TS 04.60 discloses the procedures for RLC/MAC functions of the GPRS

radio interface (Um) when operating on a Packet Data Channel (PDCH).

4.   Regarding **claims 1, 7, 13 and 20**, 3GPP TS 04.60 teaches a method for

operating a wireless communication system having packet data capabilities, comprising:

sending a message from a mobile station to a network on a same physical channel that

is used to transmit packet data, the message specifying individual ones of packet

system information (PSI) messages that are required for reception by the mobile station;

and in response to receiving the message, sending PSI messages from the network to the mobile station over the same physical channel used to transmit the packet data. **(See Section 5.5.1.4, Page 21, Lines 7-9 and 16-20; 3GPP TS 04.60 discloses that the mobile station receives packet data information on the PBCCH and packet system information message is sent by the network on PACCH. As shown in Figure 1 on Page 14, PACCH and PBCCH are two different logical channels on the same physical channel. 3GPP TS 04.60 further discloses that the mobile station to indicate to the network what packet system information messages it has received uses the Packet PSI Status message. See Page 123. As indicated in the last paragraph of Section 5.5.1.4.3 the Packet PSI Status message is sent until all necessary packet system information messages are sent by the network and acknowledged by the mobile station. See Page 25 Last Paragraph.)**

3GPP TS 04.60 fails to disclose that the mobile station can specify individual system information messages, it desires, to the network and that the network complies with the request.

Mohindra discloses a method for providing inter-application communication between a sending device and one or more receiving devices in a wireless network.

Mohindra teaches that a mobile station can request specific system information messages from the network and the network will only send the requested system information messages. **(See Column 2, Lines 1-15; Mohindra describes the Push Procedure where the sender as part of registration and acquisition process requests specific data to be sent to it. Mohindra indicates this procedure is**

applicable to wireless networks as long as the receiver and the sender are aware of each other's location. Once the appropriate control and traffic channels are established then the base station (i.e. receiver of request to register) can specifically send messages to and receive messages from the mobile station (i.e. sender of request to register) and therefore the Push Procedure described by Mohindra is applicable. However, Mohindra also addresses the issue of the mobile and the base station not being aware of each other. In this case, where the participating entities are not aware of each other, the base station tags the data items to be sent with an identifier that is unique in the context of the intended communication (e.g. system information, stock quotes, weather, etc...). Then the base station broadcasts the tagged data items in the wireless network. The mobile station then picks the specific data items it desires from the base station broadcast of data items by matching the tag with that of the data items being broadcast that are of interest to the mobile. Therefore, Mohindra's system allows the mobile to request and receive specific system information messages from the network. See Column 3, Lines 5-20)

It would have been obvious to one having ordinary skill in the art at the invention was made to modify 3GPP TS 04.60' s method by incorporating Mohindra's push procedure, the motivation being the mobile station can save radio resources and reduce battery consumption by not requesting unnecessary system information such as the one already stored in the system each time it changes cells or while moving in the same cell.

5.   Regarding **claims 2 and 8**, 3GPP TS 04.60 discloses a method, wherein the

message is a PACKET PSI STATUS message. **(See message description on Page**

123 and Section 5.5.1.4.3)

6.   Regarding **claims 3 and 9**, 3GPP TS 04.60 discloses a method wherein the

physical channel conveys a Packet Associated Control Channel (PACCH). **(See Page**

21, Lines 16-20)

7.   Regarding **claims 4 and 10**, 3GPP TS 04.60 discloses a method including,

wherein the operations of sending the message and transmitting the PSI messages

occur during a packet data transfer mode without suspending an established Temporary

Block Flow (TBF). **(See Section 5.5.1.2.1 1st Paragraph and Section 5.5.1.4, Page 21,**

Line 19; Note that the TBF as specified in the specification on Page 2 line 12 is

simply packet data flow in both directions. 3GPP TS 04.60 clearly shows in packet

transfer mode PSI are sent via the control channel (PACCH) without suspending

packet data transmission (i.e. TBF) on PBCCH)

8.   Regarding **claims 5, 11, 13 and 21**, 3GPP TS 04.60 discloses a method,

wherein the mobile station fills the Packet PSI Status message by including fields

PSIx_COUNT and Instance_Bitmap, and by setting their respective fields to zero for the

particular PSI message type in the PACKET PSI STATUS message. **(See Page 123 for**

the description and use of the different fields of the Packet PSI STATUS message.

To implement Mohindra's push procedure while keeping the existing RLC/MAC

protocol of 3GPP TS 04.60, the ideal existing message to modify for requesting

system information message from the network will be Packet PSI STATUS

message. However, a new message can easily be added in the protocol.)

9.   Regarding **claims 6, 12, 15 and 22**, 3GPP TS 04.60 discloses a method,

wherein, in response, the network determines that the mobile station has not received

the particular PSI message type, and disregards an indicated PSI_CHANGE_MARK in

the PACKET PSI STATUS message. **(See Page 123 for the description and use of**

the different fields of the Packet PSI STATUS message. To implement Mohindra's

push procedure while keeping the existing RLC/MAC protocol of 3GPP TS 04.60,

the ideal existing message to modify for requesting system information message

from the network will be Packet PSI STATUS message. However, a new message

can easily be added in the protocol.)

10.   Regarding **claims 16 and23**, 3GPP TS 04.60 discloses a method, wherein

sending the PACKET PSI STATUS message comprises indicating mobile station-

supported PSI message types in a Received PSI Message List in the PACKET PSI

STATUS message. **(See Page 123 for the description and use of the different fields**

of the Packet PSI STATUS message. 3GPP TS 04.60 discloses that the PSI

Message List in the PACKET PSI STATUS message indicates the system

information messages already received by the mobile and has to be supported by

the mobile. To implement Mohindra's push procedure of course either the Packet

PSI Status message has to be modified by adding new fields or one needs to

modify the use of current fields in the message to accommodate the new

functionality taught by Mohindra.)

11.   Regarding **claims 17 and 24,** 3GPP TS 04.60 discloses a method, wherein the mobile station indicates in the PACKET PSI STATUS message, for each PSI message type for which the mobile station desires a PSI CHANGE MARK value, the present status of the PSI message type and that the PSI message type has not been received. **(See Page 123 for the description and use of the different fields of the Packet PSI STATUS message. See also Page 26, Table 1; 3GPP TS 04.60 discloses the use of PSIX_CHANGE_MARK message in relation to the system information messages received by the mobile. To implement Mohindra's push procedure of course either the Packet PSI Status message has to be modified by adding new fields or one needs to modify the use of current fields in the message to accommodate the new functionality taught by Mohindra.)**

12.   Regarding **claims 18 and 25**, 3GPP TS 04.60 discloses a method wherein the mobile station desires the PSI CHANGE MARK value at least during a partial acquisition of PSI messages. **(See Page 19, Lines 7-8, Page 26,Table 1)**

13.   Regarding **claims 19 and 26**, 3GPP TS 04.60 discloses that for the PSI messages that are required for reception by the mobile station, the PSI message type can be indicated to be present on a Packet Broadcast Control Channel by the network. **(See Section 5.5.2.1.2 1st Paragraph.)**

        3GPP TS 04.60 however fails to disclose that the PSI message types that are desired for reception by the mobile station are selected based on the features the mobile supports.

Mohindra discloses that the PSI message types that are required for reception by the mobile station are those that the mobile station considers relevant based on the features that the mobile station supports **(See Column 2, Lines 1-5 and Column 3, Lines 5-20; In Mohindra's pull and push procedure the mobile can request specific system information messages that it considers relevant and essential to the operation of the mobile.)**

It would have been obvious to one having ordinary skill in the art at the invention was made to modify 3GPP TS 04.60' s method by incorporating Mohindra's push procedure, the motivation being the mobile station can save radio resources and reduce battery consumption by not requesting unnecessary system information such as the one already stored in the system each time it changes cells or while moving in the same cell.

Conclusion

14.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patent is cited to show the state of the art with respect to broadcasting system information in a cellular communication network:

US Patent (6, 628, 946) to Wiberg et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Habte Mered whose telephone number is 571 272 6046. The examiner can normally be reached on Monday to Friday 9:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Hassan Kizou can be reached on 571 272 3088. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

HM
06-24-2005

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